

To: Facsimile Number: 703-872-9306

Total Pages Sent 8

From:

Texas Instruments Incorporated
Facsimile: 972-917-4418

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Applicant Andrew Marshall

Docket Number: TI-34177

Serial No.: 10/626,438

Art Unit: 2818

Filed: 07/24/03

Examiner: Thong Quoc Le

For: Circuit for Reducing Standby Leakage in a Memory Unit

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below:

Karen Vertz
Karen Vertz

4-14-05
Date

FACSIMILE COVER SHEET

<input checked="" type="checkbox"/> FACSIMILE COVER SHEET	<input checked="" type="checkbox"/> AMENDMENT <u>111 (6 pages)</u>
<input type="checkbox"/> NEW APPLICATION	<input type="checkbox"/> EOT
<input type="checkbox"/> DECLARATION	<input type="checkbox"/> NOTICE OF APPEAL
<input type="checkbox"/> ASSIGNMENT	<input type="checkbox"/> APPEAL <u>(# Pages)</u>
<input type="checkbox"/> FORMAL DRAWINGS	<input type="checkbox"/> ISSUE FEE & PUBLICATION FEE (1 Page)
<input checked="" type="checkbox"/> INFORMAL DRAWINGS - 1 page	<input type="checkbox"/> REPLY BRIEF (IN TRIPLICATE) (# Pages)
<input type="checkbox"/> CONTINUATION APP'N	<input type="checkbox"/> ELECTION
<input type="checkbox"/> DIVISIONAL APP'N	
NAME OF INVENTOR(S): Andrew Marshall	
RECEIPT DATE & SERIAL NO.: Serial No.: 10/626,438 Filing Date: 07/24/03	
TITLE OF INVENTION: Circuit for Reducing Standby Leakage in a Memory Unit	
TI FILE NO.: TI-34177	DEPOSIT ACCT. NO.: 20-0668
FAXED: 4-14-05 DUE: 4-14-05 ATTY/SEC'Y: AKS/kjv	

This facsimile is intended only for the use of the address named and contains legally privileged and/or confidential information. If you are not the intended recipient of this telecopy, you are hereby notified that any dissemination, distribution, copying or use of this communication is strictly prohibited. Applicable privileges are not waived by virtue of the document having been transmitted by Facsimile. Any misdirected facsimiles should be returned to the sender by mail at the address indicated on this cover sheet.

Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, TX 75265-5474

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Andrew Marshall

Art Unit: 2818

Serial No.: 10/626,438

Examiner: Thong Quoc Le

Filed: 07/24/03

Docket: TI-34177

For: CIRCUIT FOR REDUCING STANDBY LEAKAGE IN A MEMORY UNIT

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

CERTIFICATION OF FACSIMILE TRANSMISSION
I hereby certify that the above correspondence is
being transmitted by facsimile to the U.S. Patent
and Trademark Office at 703-872-9306 on the date
shown below:

Karen Vertz
Karen Vertz

4-14-05
Date

AMENDMENT

In response to the Official Action in this case mailed
January 14, 2005, please enter the following:

IN THE CLAIMS

1. (Currently amended) A circuit for reducing standby leakage in a memory unit, comprising:
a capacitive divider coupled to the memory unit so as to generate a voltage across the memory unit, the voltage being adequate to retain memory values during one of a sleep state and a standby state, wherein the memory unit is coupled between Vss and Vddinternal terminals.
2. (Original) The circuit according to claim 1, wherein said capacitive divider is coupled to the memory unit on-chip.
3. (Original) The circuit according to claim 1, wherein the voltage is a division of a normal operating voltage.
4. (Original) The circuit according to claim 3, wherein the voltage is substantially $V_{dd}/2$.
5. (Original) The circuit according to claim 3, wherein the voltage is substantially $V_{dd}/3$.
6. (Original) The circuit according to claim 1, wherein said capacitive divider is configured for varying an oscillator frequency in accordance with the generated voltage so as to minimize switching losses.

7-10. (Cancelled)

11. (Currently amended) An inductive circuit for reducing standby leakage in a memory unit, comprising:

an inductive divider coupled to the memory unit so as to generate a voltage across the memory unit, the voltage being adequate to retain memory values during one of a sleep state and a standby state, wherein the memory unit is coupled between Vss and Vddinternal terminals.

12. (Original) The inductive circuit according to claim 11, wherein said inductive divider is coupled to the memory unit on-chip.

13. (Original) The inductive circuit according to claim 11, wherein the voltage is a division of a normal operating voltage.

14. (Original) The inductive circuit according to claim 13, wherein the voltage is substantially $V_{dd}/2$.

15. (Original) The inductive circuit according to claim 13, wherein the voltage is substantially $V_{dd}/3$.

16. (Original) The inductive circuit according to claim 11, wherein said inductive divider is configured for varying an oscillator frequency in accordance with the generated voltage so as to minimize switching losses.

17-20. (Cancelled)

REMARKS

Claims 1-20 are pending in the application. Claims 1-6, 8-16 and 18-20 are rejected. Claims 7 and 17 are objected to. Claims 1 and 11 have been amended. Claims 7-10 and 17-20 have been cancelled.

The drawings were objected to. A drawing replacement sheet is attached that adds the legend "Prior Art" to Figure 1 and adds the labels 200, 202, and 204 to Figure 2.

The drawings were objected to because the drawings must show every feature of the invention specified in the claims. This has been corrected by canceling Claims 8, 9, 18, and 19.

Claim 1 has been amended to include the limitations of objected claim 7. Claims 2-6 depend from claim 1. Claim 11 has been amended to include the limitations of objected claim 17. Claims 12-16 depend from claim 11. Therefore, claims 1-6 and 11-16 are believed to be allowable.

It is believed that the above remarks and amendments are fully responsive to the Official Action. Reconsideration and allowance are therefore respectfully requested.

Respectfully submitted,



Alan Stewart
Registration No. 35,373

Texas Instruments, Incorporated
P. O. Box 655474 - M/S 3999
Patent Department
Dallas, Texas 75265

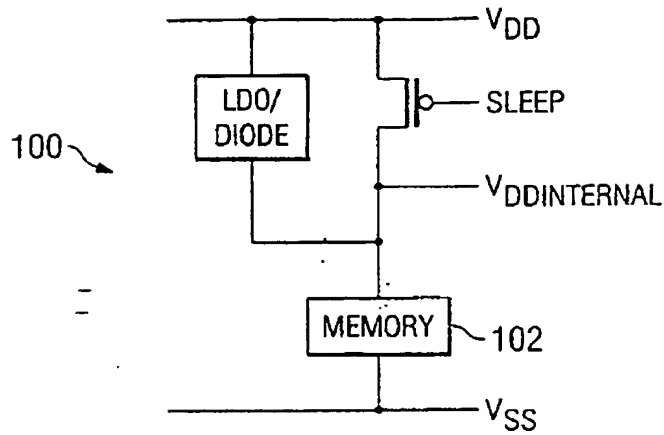


FIG. 1
(Prior Art)

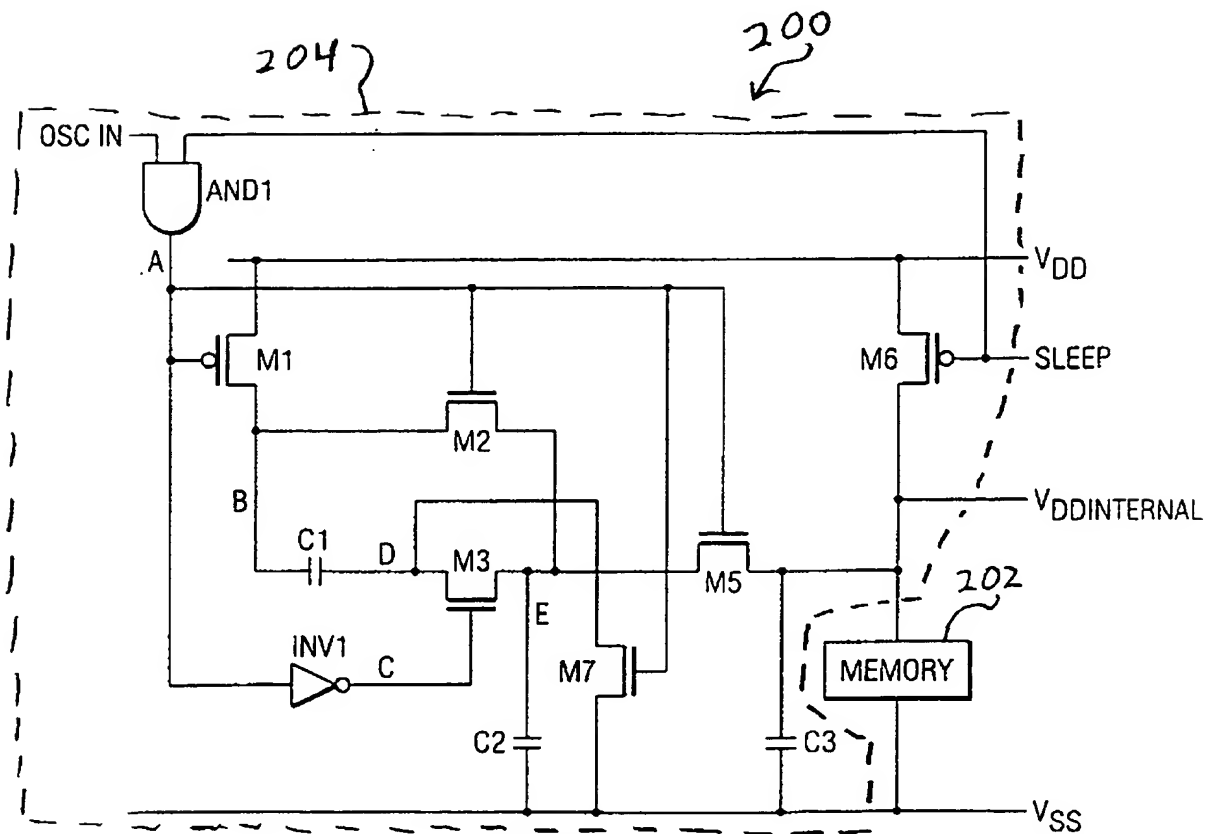


FIG. 2

BEST AVAILABLE COPY